



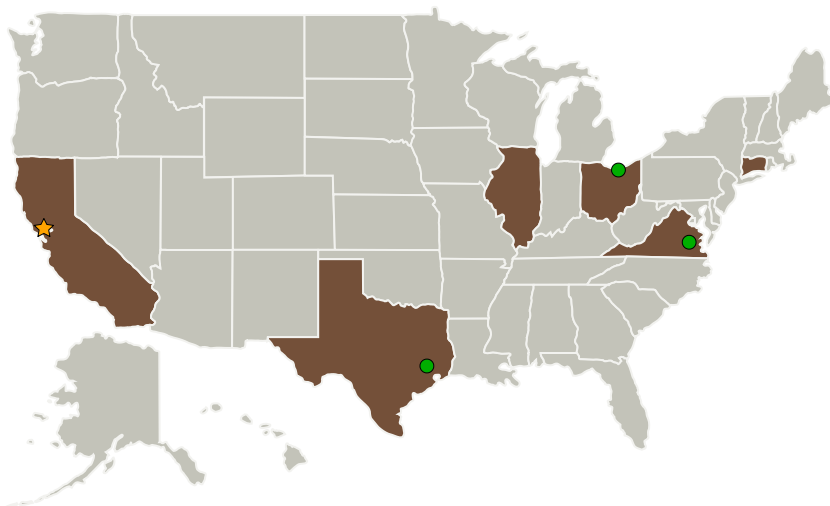
Project Introduction

Model and tool development & validation across the speed range for key challenges in EDL Aerosciences, with an emphasis on key technical challenges as identified by the NESC Aerosciences TDT.

Anticipated Benefits

Understand capsule stability for Orion, MSR-EEV Parachute dynamics for Orion, CCP, Mars Exploration Program, ASPIRE Improved simulation capabilities addressing key aerosciences challenges Parachute dynamics for Commercial Crew

Primary U.S. Work Locations and Key Partners



Aerosciences

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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Ames Research Center (ARC)

Responsible Program:

Game Changing Development



Organizations Performing Work	Role	Type	Location
★ Ames Research Center(ARC)	Lead Organization	NASA Center	Moffett Field, California
● Glenn Research Center(GRC)	Supporting Organization	NASA Center	Cleveland, Ohio
● Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas
● Langley Research Center(LaRC)	Supporting Organization	NASA Center	Hampton, Virginia

Co-Funding Partners	Type	Location
Early Career Faculty(ECF)	NASA Other	
Early Stage Innovations(ESI)	NASA Other	
Internal Research and Development	NASA Program	
Planetary Science	NASA Program	
Space Technology Research Fellowships(NSTRF)	NASA Program	
Space Technology Research Grants(STRG)	NASA Program	

Primary U.S. Work Locations	
California	Connecticut
Illinois	Ohio
Texas	Virginia

Project Management

Program Director:

Mary J Werkheiser

Program Manager:

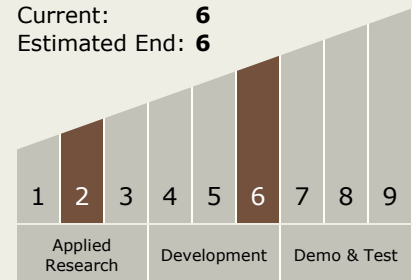
Gary F Meyering

Principal Investigator:

Michael J Wright

Technology Maturity (TRL)

Start: 2
Current: 6
Estimated End: 6



Technology Areas

Primary:

- TX09 Entry, Descent, and Landing
 - TX09.4 Vehicle Systems
 - TX09.4.5 Modeling and Simulation for EDL

Target Destinations

Earth, The Moon, Mars



Project Website:

https://www.nasa.gov/directorates/spacetech/game_changing_development/index.html